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et al.

U.S.S.N.: 10/813,842 *CONFIRMATION NO*.: 6059

FILING DATE: March 31, 2004 EXAMINER: Kim, Eunhee

CUSTOMER NO. **24227**

TITLE: METHOD AND APPARATUS FOR MULTI-REALM SYSTEM MODELING

Mail Stop: Pre-Appeal Conference

Commissioner for Patents

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PRE-APPEAL BRIEF

Sir:

Applicants hereby respectfully request review of the Final Office Action of August 17, 2009 as, in Applicants' view, the cited art is insufficient to reject Applicants' claims. For a pending list of Claims, please see the previous filed response. Claims 1, 62, 88, 147, 205, and 236 are the method, system, computer product, and apparatus version of each, and were rejected together under 35 US 102 as anticipated by Bowman-Amuah (ES Patent No. 6,289,382), hereinafter Bowman. Applicants assert that Bowman may not be used as a proper 35 USC 102 rejection as it does not disclose each and every element of the claimed invention. The rejection of all other claims relies on this 35 USC 102 rejection of the independent Claims.

Applicants assert that this 35 USC 102 Bowman rejection, maintained across 4 continuations of the instant application, is unclear and cites inconsistent and unrelated portions of the Bowman reference. However, as best understood by applicants, Applicants would respectfully assert that Bowman does not disclose, at least, 1) "unifying objects in said realms based on said associations that said at least one object is common to at least two of said plurality of realms;" and 2) "processing a function in a realm independent of said other realms based on said processing propagating a behavior of one of the unified objects of one realm to said unified object of another realm using at least one association between the one realm and the another realm," as claimed.

The Office Action asserts that "Realms" are interpreted as OOP Objects. Then, the Office Action asserts that "Business Components" are "realms." (Response to Arguments Pg 14) Business Components appear to be defined in the Bowman to be abstract logical concepts: "[t]hey view components as a means for modeling real-world concepts in the business domain. These are Business Components." "To use an analogy, the designer of a PC workstation would

U.S.S.N.: 10/813,842 Filing Date: 3/31/2004

EMC Docket No.: EMC-05-098(PRO)ORD

initially think in terms of logical components such as Disk Storage, Memory, Display, etc. These are analogous to Business Components." C. 125 l. 25-50. "Business Components represent real-world concepts in the business domain." C. 125 l. 55-65. Conversely, in the instant application it is stated "[a]s used herein, a "realm" is any collection of objects that model some or all components of a system and/or relationships between the components."

The Office Action asserts the "Business Components" are unified to the "OOP objects" (Partitioned Business Components). (Response to Arguments Pg 14). However, Applicants assert this is inapposite with what Bowman states. At Col. 125 l. 40-50, Bowman states "[a]t some point in the design process, however, this thinking must become more precise. For example, Disk Storage might become a Hard Disk Drive and Disk Controller Card. These are analogous to Partitioned Business Components. And finally, the designer might use generic parts in the design of the Disk Controller Card, such as Memory Chips for cache, Bus Adapters, etc. These are analogous to Engineering Components." At Col. 126 l. 2-5. Bowman states "[w]hereas Business Components model real-world concepts in the business domain, Partitioned Business Components implement those concepts in a particular environment." Therefore, Partitioned Business Components appear to be implementations of an abstract concept in an OOP component.

Conversely, the instant disclosure states "[a]s used herein, the term "unification" refers to the manual or automated process of recognizing that two or more objects represent the same component or portions thereof, or collection of components; or that two or more objects are related because they represent related components." Applicants assert that "implementation" is not equivalent to "recognizing that two or more objects represent the same component or portions thereof, or collection of components; or that two or more objects are related because they represent related components" and that Bowman does not disclose this recited feature.

The Office Action also asserts that the recited feature of "propagating a behavior of one of the unified objects of one realm to said unified object of another realm using at least one association between the one realm and the another realm" is shown at Fig. 36, 73-76, Col. 33 l. 50-56,Col. 78 l. 63-67, Col. 126 l. 2-66, Col. 283 l.47-67, in the Response and, inconsistent with portions cited in the Response, states this feature is shown at Col 128 l. 1-61 in the Response to the Arguments. Applicants note the instant specification states "[a]s used herein, the term "association" refers to two or more objects of different realms representing the same system

U.S.S.N.: 10/813,842 Filing Date: 3/31/2004

EMC Docket No.: EMC-05-098(PRO)ORD

component or the same collection of system components; or an object representing a relationship or relationships between system components."

Applicants assert that Col 128 l. 1-61 and the portion quoted in the Office Action, "Business Components that controls the flow of a business process by requesting in a specific sequence according to business rules," are not equivalent to "processing a function in a realm ... based on said processing propagating a behavior of one of the unified objects of one realm to said unified object of another realm using at least one association between the one realm and the another realm." The instant disclosure states "[c]hanges to components in one subsystem may create propagated changes in other components in other subsystems" and "any behavior in one subsystem may propagate and generate behaviors in other subsystems and thus affect overall processing." However, Applicants respectfully assert that the claimed "propagating" is not equivalent to "the flow of a business process" as is asserted in the Office Action; as it is not based on a "unified object of another realm using ... one association between the one realm and the another realm." Applicants respectfully assert that "business flow" does not disclose "unifying objects in said realms" and therefore does not disclose "propagating a behavior of one of the unified objects of one realm to said unified object of another realm."

At Col. 283 lines 47-67, Bowman seems discuss access to data in a database: "The object identifier (or OID) must contain enough information to uniquely identify the instance. This identifier could be a unique row id generated by a database, a UUID generated by a utility or a unique string generated from one 50 or more attributes ... [b]elow is a simple example that illustrates the relationship between two classes using object identifiers." Applicants assert that there is no indication that the objects in the database are "unified objects of one realm ... and the another realm" or that they are used for "propagating." Rather, Bowman states that objects may be accessed in a database and that objects may have a relationship.

At Col. 126 lines 2-66, Bowman discuses "Business Components [which] model real-world concepts in the business domain" and "Partitioned Business Components [which] implement those concepts in a particular environment." Bowman states "Business Components provide an underlying logical framework for ensuring flexibility, adaptability, maintainability, and reusability . . . serve to break down large, complex problems into smaller, coherent elements . . . model the business in terms of the real-world concepts that make up the domain." Bowman

U.S.S.N.: 10/813,842 Filing Date: 3/31/2004

EMC Docket No.: EMC-05-098(PRO)ORD

states "Partitioned Business Components and Engineering Components provide a means for implementing, packaging, and deploying the application."

However, Applicants would respectfully assert that this discussion on "Business Components models" and later "Partitioned Business Components" does not disclose "processing a function in a realm independent of said other realms, and based on said processing propagating a behavior of one of the unified objects of one realm to said unified object of another realm using at least one association between the one realm and the another realm." Applicants respectfully assert this is not equivalent to at least because the cited portion of Bowman is not "based on said processing propagating a behavior of one of the unified objects." Rather, here Bowman discusses an "implementation."

At Col. 78 lines 63-67, Bowman states "EDI standards (e.g., EDIFACT, ANSI X12) define record layouts for transactions such as "purchase orders." EDI services include the generation and translation of EDI messages according to the various public message layout standards." Col 78 l. 59-62 states "EDI (Electronic Data Interchange) supports system-to system messaging among business partners by defining standard message layouts. Companies typically use EDI to streamline commercial transactions within their supply chains." Applicants respectfully assert this is not equivalent to "processing a function in a realm independent of said other realms, and based on said processing propagating a behavior of one of the unified objects of one realm to said unified object of another realm using at least one association between the one realm and the another realm" at least because the cited portion of Bowman is not "based on said processing propagating a behavior of one of the unified objects." Applicants assert that "generation and translation of EDI messages" and "system-to system messaging among business partners" is not equivalent to "propagating a behavior of one of the unified objects."

At Col 33 1. 50-56, Bowman states "Three-tiered architecture describes a distributed application architecture in which business applications are separated into three logical components: presentation and control, application logic, and data management. These logical components are "clean layered" such that each runs on a different machine or platform, and communicates with the other components via a network." However, Applicants respectfully assert this is not equivalent to "processing a function in a realm independent of said other realms, and based on said processing propagating a behavior of one of the unified objects of one realm to

U.S.S.N.: 10/813,842 Filing Date: 3/31/2004

EMC Docket No.: EMC-05-098(PRO)ORD

said unified object of another realm using at least one association between the one realm and the another realm" at least because the cited portion of Bowman is not "based on said processing propagating a behavior of one of the unified objects." Applicants again respectfully assert that "communicates with the other components via a network" is not equivalent to "propagating a behavior of one of the unified objects." Applicants further assert that Figures 36 and 73-76 do not disclose these claimed features.

Therefore, Applicants would respectfully assert that Bowman does not disclose "processing a function in a realm independent of said other realms, and based on said processing propagating a behavior of one of the unified objects of one realm to said unified object of another realm using at least one association between the one realm and the another realm." Not disclosing each and every element of Claims 1, 62, 88, 147, 205, and 236, Applicants assert Bowman may not be used as a proper 35 USC 102 rejection. Therefore Applicants respectfully request that the rejection of Claims 1, 62, 88, 147, 205, and 236 be withdrawn and these claims be placed in condition for allowance. As Claims all other claims depend on Claims 1, 62, 88, 147, 205, and 236 and Applicants believe that Claims 1, 62, 88, 147, 205, and 236 are allowable, Applicants believe that the dependant claims should allowable for at least the same reasons. Therefore, Applicants respectfully request withdrawal of the rejections of the dependant claims and that the dependant claims also be placed in condition for allowance.

Conclusion

In view of the foregoing, the Applicants believe that the application is in condition for allowance and respectfully request favorable reconsideration.

In the event the Examiner deems personal contact desirable in the disposition of this case, the Examiner is invited to call the undersigned attorney at (508) 293-7450.

Please charge all fees occasioned by this submission to Deposit Account No. <u>05-0889</u>. Respectfully submitted,

Dated: January 19, 2010 /Joseph J. D'Angelo/
Joseph J. D'Angelo (Reg. No. 56,800)